

Lab 1 – Play with Python(s)

Task1 – Know Your Computer

This task requires you to get familiar with the computing resources available for the MPT classes and to get organised for the practical classes.

- Start the File Explorer.
- See the structure of Computer:
 - C ➔ local drive so you do not have any r/w rights.
 - Z ➔ your home account with full r/w privileges.
 - Z/public_html ➔ your web space yet to be updated.
- Make a folder python_labs on Z:
- Make a folder lab1 in python_labs for doing the work for today.
- Explore ‘Start/All Programs’ to see the software available to you.
- Find and launch **Idle 3.4** [make sure it is not Idle 2.7]

Task2 – Play with Python

This task is to do some exercising with the Python interpreter to include maths calculations, string manipulation, prints of some variables.

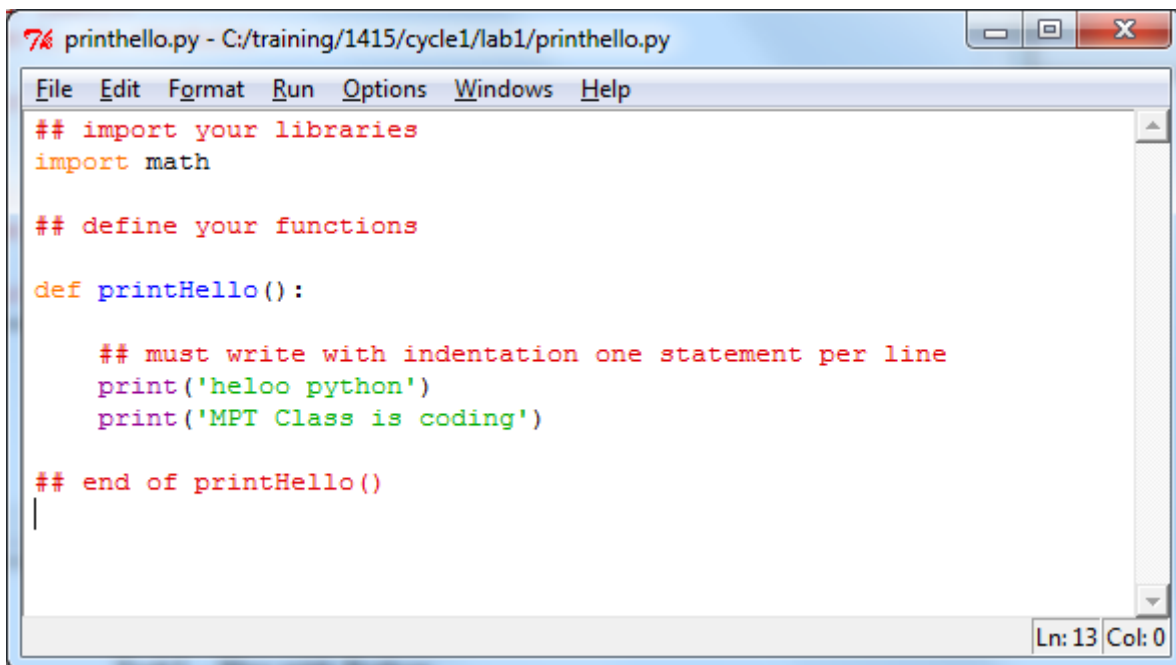
- Do some maths to include all operations +, -, *, /, //, %, **
- Import math [all the maths functions are now available to you]
- Do some more maths to include some math functions math.sin(), math.log(), etc
- Do some string manipulations like +, *, etc
- Play with some variables and print them.

Task3 – Develop your first Python program

This task is to do create your first python program [a file with the extension .py] for doing some prints.

- Open a new Python window [it comes as empty]
- Do some line comments using either # or ''.
- Develop your own function to print some text.
- Play with some variables and print them as in the screenshot.
- Note the following:
 - # introduces a line comment [line not interpreted]

- `def printHello():` is to define a function
- all the lines in the function are written with indentation [one tab space left]
- Go now to the interpreter and execute the function by calling its name `printHello()`



```
7% printhello.py - C:/training/1415/cycle1/lab1/printhello.py
File Edit Format Run Options Windows Help
## import your libraries
import math

## define your functions

def printHello():

    ## must write with indentation one statement per line
    print('heloo python')
    print('MPT Class is coding')

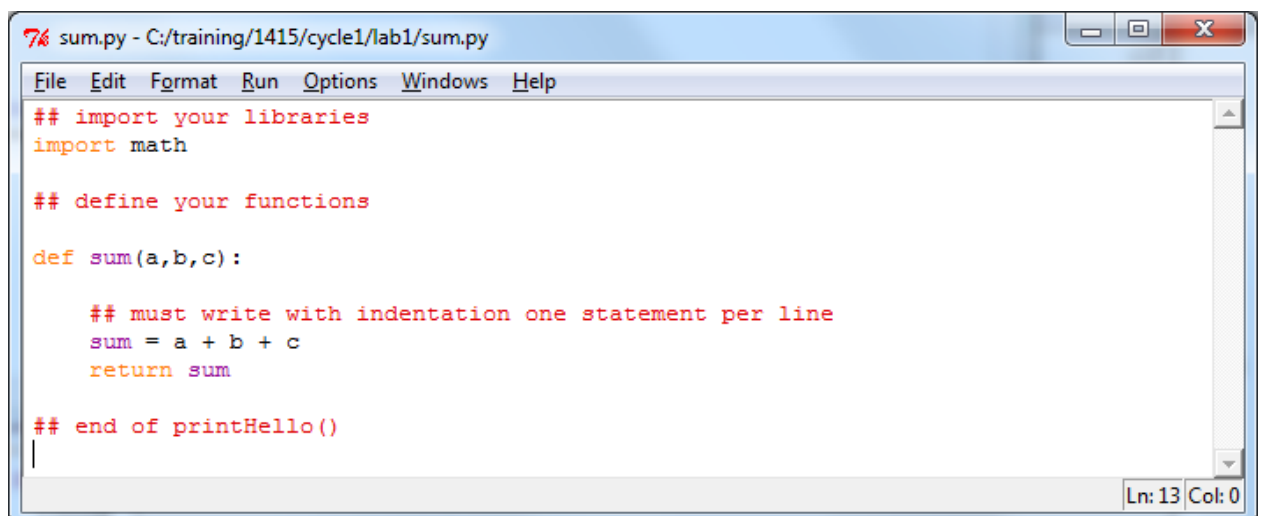
## end of printHello()
|
```

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Task4 – Develop your first Python calculation program

This task is to do create your first python program to calculating something.

- Open a new Python window [it comes as empty]
- Do some line comments using either `##` or `'''` to give the structure of your program.
- Develop your own function to calculate the sum of two numbers.
- Go now to the interpreter and execute the function by calling its name



```
7% sum.py - C:/training/1415/cycle1/lab1/sum.py
File Edit Format Run Options Windows Help
## import your libraries
import math

## define your functions

def sum(a,b,c):

    ## must write with indentation one statement per line
    sum = a + b + c
    return sum

## end of printHello()
|
```

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